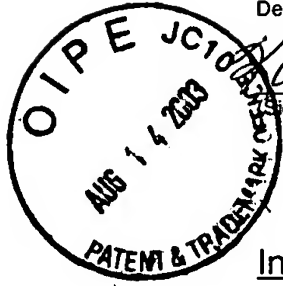


I hereby certify that this correspondence is being deposited with the United States Postal Service as in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313, on August 12, 2003. The applicant and/or attorney requests the date of deposit as the filing date.
Depositor: Karen Cing-Mars



(Signature & date)

Karen Cing-Mars 8/12/03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of _____: August 12, 2003
Hendrik F. Hamann et al. : Group Art Unit:
Serial No. 10/604,486 : Examiner:
Filed: 07/25/2003 : International Business Machines Corporation
2070 Route 52
Hopewell Junction, NY 12533

TITLE: SYSTEM AND METHOD OF ALTERING A VERY SMALL SURFACE AREA BY
MULTIPLE CHANNEL PROBE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

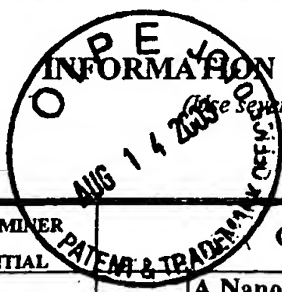
Pursuant to the duty of disclosure set forth in 37 C.F.R. 1.56, and further pursuant to the provisions of 37 C.F.R. 1.97 and 1.98, applicants hereby respectfully submit copies of the prior patents and publications as listed on Form PTO-1449, attached hereto.

In citing these documents, no representation is made nor intended as to the pertinency or non-pertinency of the art, that better art than that listed is not available, or that other art is not applicable.

Respectfully submitted,
Hendrik F. Hamann et al.

BY

Steven Capella, Attorney
Registration No. 33,086
Telephone No. 845-894-3669



INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)		Docket Number (Optional) FIS920020170US1	Application Number 10/604,486
		Applicant(s) Hendrik F. Hamann et al.	
		Filing Date 07/25/2003	Group Art Unit
*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
	A Nanoplotter with Both Parallel and Serial Writing Capabilities, Seunghun Hong and Chad A. Mirkin, Science Magazine, Vol. 288, June 9, 2000		
	New Fields for STMs, Jim Gimzewski, IBM Zurich Research Lab		
	Nanonics Co., Near-Field Optical Products (Probes), 8/15/2001 http://www.nanonics.co.il/cont/probes.html .		
	Probe Specifications, Cantilevered/Straight NSOM Optical Fiber for Simultaneous Normal Force AFM and NSOM; http://www.nanonics.co.il/cont/tip_specs.html .		
	AFM Single & Dual Wire Thermal & Electrochemical Glass Sensors & Heaters, Nanonics Imaging Ltd., www.nanonics.co.il August 16, 2001.		
	The NSOM-100 A Multifunctional Near-Field Optical Scanned Probe Confocal Microscope, www.nanonics.co.il		
	Strength of Electric Field in Apertureless Near-Field Optical Microscopy, Yves C. Martin et al., IBM Research Report, RC21891 (98484) 11/9/2000.		
	Scanning Electron Microscope Using Atomically Fine Field Emission/Tip, P.E. Batson et al., YO8880445, IBM Technical Disclosure Bulletin, Vol. 37, No. 10, October 1994.		
	Direct Pattern Writing by Local heating in a Scanning Tunneling Microscope, M. Liehr et al. Y08850624, IBM Technical Bulletin, Vol. 29, No. 6, 11/1986.		
	Etched Microcavities for Mechanical Clamping of Atomic Force Sensors, T. Bayer et al. GE8960053, IBM Technical Disclosure Bulletin, Vol 40, No. 04, April 1997.		
	Task ID: 460.003, Task Title: Maskless Lithography, Task Leader: William G. Oldham, Univ. of California/Berkeley, Co-Task Ldr: Calvin F. Quate-Stanford University, Deliverable: December 2000, Maskless Lithography with Scanning Probes.		
	Self-Assembly of Ink Molecules in Dip-Pen Nanolithography: A Diffusion Model, Joonkyung Jang et al., Journal of Chemical Physics, Vol. 115, No. 6, 8/8/2001.		
EXAMINER		DATE CONSIDERED	
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

FIS920020170US1

Application Number

10/604,48'6

Applicant(s)

Hendrik F. Hamann t al.

Filing Date

07/25/2003

Group Art Unit

*EXAMINER

INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Dip-Pen Nanolithography n Semiconductor Surfaces, Albena Ivanisevic et al., J. Am. Chem. Soc. 2001, 123, 7887-7889.

Multiple Ink Nanolithography: Toward a Multiple-Pen Nano-Plotter, Seunghun Hong et al., Science Magazine, Vol. 286, 10/15/1999.

Dip-Pen Nanolithography, Richard D. Piner et al., Science Magazine, Vol. 283, 01/29/1999.

Surface Science and Dip-Pen Nanolithography, Dr. Shouwu Gou et al., 07/08/2002.

Progress on Nanostructuring with Nanojet, Jens Voight et al., paper #85, P-9-4, 2000.

Research Shows Potential of Nanojets for Smaller Circuitry & Injecting Games, Science Daily Magazine, 08/31/2000.

Progress on Nanostructuring with Nanojet, J. Voigt., 11/1999.

Investigating Material and Functional Properties of Static Random Access Memories Using Cantilevered Glass Multiple-Wire Force-Sensing Thermal Probes, Rimma Dekhter et al. Applied Physics Letters, Vol. 77, No. 26, 12/15/2000.

Near-Field Scanning Optical, Atomic Force, Scanning Resistance and uv Concocal Microscopy in the Failure Analysis f ULSIs Produced with the Most Advanced Sub-Quarter Micron Design Rules, Aaron Lewis, et al., Div. of Applied Physics, The Hebrew University of Jerusalem, Israel.

Failure Analysis of Integrated Circuits Beyond the Diffraction Limit: Contact Mode Near-Field Scanning Optical Microscopy with Integrated Resistance, Capacitance, and UV Confocal Imaging, Aaron Lewis et al., Proceedings of the IEEE, Vol. 88, No. 9, Sept. 2000.

Fountain Pen Nanochemistry: Metallic Nano-etching and Nonolithography, Aaron Lewis, Div. of Applied Physics. The Hebrew University of Jerusalem, Israel.

Fountain Pen Nanochemistry: Atomic Force Control of Chrome Etching, Aaron Lewis, Applied Physics Letters, Vol. 75, No. 17, 10/25/1999.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

FIS9200201.70US1

Application Number

10/604,48'6

Applicant(s)

Hendrik F. Hamann et al.

Filing Date

07/25/2003

Group Art Unit

*EXAMINER
INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1998 SRC Annual Review, Near-Field Optics for Metrology and Lithography, Research ID 438, Robert Grober, Dept. of Applied Physics, Yale University.

Maskless Lithography Using Scanning Probes, Kathryn Sara Wilder, GL report No. 5670, Edward L. Ginzton Lab., Stanford University, August 1999.

Fabrication of Nanometer Scale Structures, Munir H. Nayfeh, Dept. of Physics, Univeristy of Illinois at Urbana-Champaign, Illinois.

Direct Writing of Metallic Nanostructures with the Scanning Tunneling Microscope, A.L.de Lozanne et al., Dept. of Physics, The University of Texas, Austin, Texas.

Arrayed Lithography Using STM Based Microcolumns, T.H.P. Chang et al., IBM T.J. Watson Research Center, Yorktown Heights, New York, National Nanofabrication Facility at Cornell University, Knight Lab., Ithaca, NY, Institute of Physics, University of Basel, Switzerland.

Fabrication and Characterization Using Scanned Nanoprobes, G.C. Wetsel, Jr., Erik Jonsson School of Engineering and Computer Sciences, The University of Texas at Dallas, Richardson, Texas.

Technology of Proximal Probe Lithography, Christie R.K. Marrian, Naval Research Laboratory, SPIE Institutes, Volume IS 10, 1993.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.